

International Application No.: PCT/EP2003/007515

International Filing Date: 10 July 2003

**EXPRESS MAIL TRANSMITTAL LETTER FOR
PATENT APPLICATION AND CERTIFICATE OF MAILING**
Express Mail Label No.: EV 487327591 US
Date of Deposit: January 10, 2005

In the claims

Please amend the claims as follows:

1. (currently amended) A Drug release system; comprising a shape memory material (SMP-material) and at least one drug.
2. (currently amended) The Drug release system according to claim 1, wherein the SMP-material has one or more shapes in memory.
3. (currently amended) The Drug release system according to any of the preceding claims claim 1, wherein the SMP-material is biostable or biodegradable.
4. (currently amended) The Drug release system according to any of the preceding claims claim 1, wherein the shape memory effect is used for the variation of to vary the drug release rate.
5. (currently amended) The Drug release system according to any of the preceding claims claim 1, wherein the shape memory effect is employed for the minimal invasive implantation of a drug release system is a minimally invasive implantable device.
6. (currently amended) The Drug release system according to any of the preceding claims claim 1, wherein the shape memory effect is triggered by a change in temperature, light, or a combination thereof.
7. (currently amended) The Drug release system of any of the preceding claims claim 1, wherein the drug release system is comprises a matrix system, wherein said the at least one drug is dispersed within the matrix.

International Application No.: PCT/EP2003/007515

International Filing Date: 10 July 2003

**EXPRESS MAIL TRANSMITTAL LETTER FOR
PATENT APPLICATION AND CERTIFICATE OF MAILING**

Express Mail Label No.: EV 487327591 US

Date of Deposit: January 10, 2005

8. (original) Drug release system according to claim 7, wherein the drug release system displays a change of the drug release rate after triggering of the shape memory effect.

9. (currently amended) The Drug release system according to ~~any of claims~~ claim 7 or 8, wherein the SMP-material comprises units, derived from monomers selected from the group consisting of caprolactone, lactide, glycolide and dioxanone.

10. (currently amended) The Drug release ~~systems~~ system according to ~~any of claims~~ claim 7 to 10, wherein the drug release system comprises a coating, for modification of the release properties and/or tissue compatibility.

11. (currently amended) The Drug release system according to claim 7, wherein the drug release system is ~~present in a laminate form~~, comprising at least one drug containing film made from a SMP-material, ~~wherein this film is~~ laminated on both surfaces with films not containing a drug.

12. (currently amended) The Drug release system according to ~~any of claims~~ claim 1 to 3, wherein the drug release system comprises a reservoir of drug and a coating and/or membrane made from a SMP-material.

13. (original) Drug release system according to claim 12, wherein the SMP-material, after triggering of the shape memory effect, controls the rate of release of the drug.

14. (currently amended) The Drug release system according to ~~any of claims~~ claim 1 to 3, wherein the drug release system comprises a reservoir for the drug made from a SMP-material, and a coating and/or membrane.

International Application No.: PCT/EP2003/007515

International Filing Date: 10 July 2003

**EXPRESS MAIL TRANSMITTAL LETTER FOR
PATENT APPLICATION AND CERTIFICATE OF MAILING**

Express Mail Label No.: EV 487327591 US

Date of Deposit: January 10, 2005

15. (currently amended) The Drug release system according to claim 14, wherein the shape memory effect ~~is employed for inducing~~ induces a change in shape of the reservoir, leading to a variation of the permeability of the coating and/or membrane with respect to the drug.

16. (currently amended) The Drug release system according to ~~any of claims~~ claim 1 to 3, wherein the hydrolytic degradation of the shape memory material controls the drug release.

17. (cancelled).

18. (currently amended) The Drug release system according to ~~any of the preceding claims~~ claim 1, wherein the drug release system is provided in the form of a coating on an implant.

19. (currently amended) The Drug release system according to ~~any of the preceding claims~~ claim 1 wherein the drug release system is present in the form selected from the group consisting of nano-particles, micro-particles, films, threads, and compositions for transdermal drug administration.

20. (currently amended) Method for preparing a drug release system ~~according to any of the preceding claims~~ comprising a shape memory material (SMP-material) and at least one drug, comprising the dissolution of dissolving a drug in a suitable solvent, introducing a shape memory networks network into the solution, and swelling of the network in the presence of the drug solution and withdrawing the swollen network from the solution.

21. (currently amended) The Method for the preparation of a drug release system according to ~~any of the preceding claims~~ claim 20, comprising the crosslinking of prepolymers in the presence of a drug.

International Application No.: PCT/EP2003/007515

International Filing Date: 10 July 2003

**EXPRESS MAIL TRANSMITTAL LETTER FOR
PATENT APPLICATION AND CERTIFICATE OF MAILING**

Express Mail Label No.: EV 487327591 US

Date of Deposit: January 10, 2005

22. (currently amended) The Method according to claim 21, wherein the drug is dissolved or dispersed in the mixture to be crosslinked.

23. (cancelled).